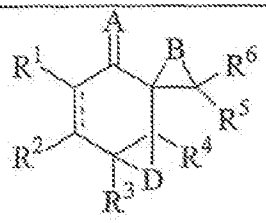
sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{18} (X = O, NR^{19} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$; and

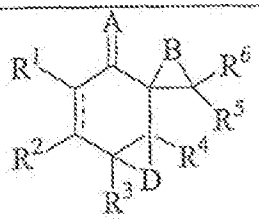
the dotted line indicates the presence of either a single or double bond, wherein the presence of a single bond, the valences are completed by hydrogens.

In a particular embodiment of the present invention, the compounds of the formula (II) are the following species:



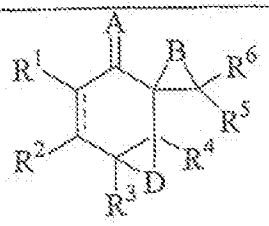
(II)

A	B	D	R^1	R^2	R^3	R^4	R^5	R^6
O	O	O	Me	H	H	H	Me	Me
O	O	O	*i*-Pr	H	H	H	Me	Me
O	O	O	Ph	H	H	H	Me	Me
O	O	O	Me	Me	H	H	Me	Me
O	O	O	*i*-Pr	Me	H	H	Me	Me
O	O	O	Ph	Me	H	H	Me	Me
O	O	O	Me	H	Me	H	Me	Me
O	O	O	*i*-Pr	H	Me	H	Me	Me



(II)

A	B	D	R^1	R^2	R^3	R^4	R^5	R^6
O	O	O	Ph	H	Me	H	Me	Me
O	O	O	Me	H	H	Me	Me	Me
O	O	O	*i*-Pr	H	H	Me	Me	Me
O	O	O	Ph	H	H	Me	Me	Me
O	O	O	Me	H	CH_2Ph	H	Me	Me
O	O	O	*i*-Pr	H	CH_2Ph	H	Me	Me
O	O	O	Ph	H	CH_2Ph	H	Me	Me
O	CH_2	O	Me	H	H	H	Me	Me
O	CH_2	O	*i*-Pr	H	H	H	Me	Me
O	CH_2	O	Ph	H	H	H	Me	Me
O	CH_2	O	Me	Me	H	H	Me	Me
O	CH_2	O	*i*-Pr	Me	H	H	Me	Me
O	CH_2	O	Ph	Me	H	H	Me	Me
O	CH_2	O	Me	H	Me	H	Me	Me
O	CH_2	O	*i*-Pr	H	Me	H	Me	Me
O	CH_2	O	Ph	H	Me	H	Me	Me
O	CH_2	O	Me	H	H	Me	Me	Me
O	CH_2	O	*i*-Pr	H	H	Me	Me	Me
O	CH_2	O	Ph	H	H	Me	Me	Me



(II)

A	B	D	R^1	R^2	R^3	R^4	R^5	R^6
O	CH_2	O	Me	H	CH_2Ph	H	Me	Me
O	CH_2	O	*i*-Pr	H	CH_2Ph	H	Me	Me
O	CH_2	CH_2	Ph	H	CH_2Ph	H	Me	Me
O	CH_2	CH_2	Me	H	H	H	Me	Me
O	CH_2	CH_2	*i*-Pr	H	H	H	Me	Me
O	CH_2	CH_2	Ph	H	H	H	Me	Me
O	CH_2	CH_2	Me	Me	H	H	Me	Me
O	CH_2	CH_2	*i*-Pr	Me	H	H	Me	Me
O	CH_2	CH_2	Ph	Me	H	H	Me	Me
O	CH_2	CH_2	Me	H	Me	H	Me	Me
O	CH_2	CH_2	*i*-Pr	H	Me	H	Me	Me
O	CH_2	CH_2	Ph	H	Me	H	Me	Me
O	CH_2	CH_2	Me	H	H	Me	Me	Me
O	CH_2	CH_2	*i*-Pr	H	H	Me	Me	Me
O	CH_2	CH_2	Ph	H	H	Me	Me	Me
O	CH_2	CH_2	Me	H	CH_2Ph	H	Me	Me
O	CH_2	CH_2	*i*-Pr	H	CH_2Ph	H	Me	Me
O	CH_2	CH_2	Ph	H	CH_2Ph	H	Me	Me

In a sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = O and D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16} and R^{17} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{20}, E = O, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19} and R^{20} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl,

carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = O, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19} and R^{20} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = O, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21} and R^{22} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = S, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21} and R^{22} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = S, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21} and R^{22} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, $B = CR^8R^8$, E = S, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21} and R^{22} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = S, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21} and R^{22} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = CR^8R^9, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21} and R^{22} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl,

carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = CR^8R^9, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21} and R^{22} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = $CR^{21}R^{22}$, E = CR^8R^9, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21} and R^{22} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = CR^8R^9, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21} and R^{22} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = NR^{23}, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = NR^{10}, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = NR^{10}, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{16}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = NR^{10}, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl,

carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = NR^{10}, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = O, E = O, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = NR^{10}, E = O, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = $CR^{20}R^{21}$, E = O, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = S, E = O, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

$A = CR^8R^9$, B = O, E = S, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

$A = CR^8R^9$, $B = NR^{10}$, E = S, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl,

carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = $CR^{20}R^{21}$, E = S, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = S, E = S, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = O, E = $CR^{20}R^{21}$, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = NR^{10}, E = $CR^{20}R^{21}$, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = $CR^{20}R^{21}$, E = $CR^{22}R^{23}$, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

$A = CR^8R^9$, $B = S$, $E = CR^{20}R^{21}$, $D = O$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} ($X = O$, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} ($X = O$, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

$A = CR^7R^8$; $B = O$.

$E = NR^7$, $D = O$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

$A = CR^8R^9$, $B = O$, $E = NR^{10}$, $D = O$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} ($X = O$, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide,

phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = NR^{10}, E = NR^{24}, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = $CR^{20}R^{21}$, E = NR^{10}, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = S, E = NR^{10}, D = O.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = O, D = CR^8R^9.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = O, D = CR^8R^9.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = O, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = O, D = CR^8R^9.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl,

carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = S, D = CR^8R^9.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = S, D = CR^8R^9.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = S, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = S, D = CR^8R^9.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = CR^8R^9, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = $CR^{8}R^{9}$, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = $CR^{8}R^{9}$, E = $CR^{20}R^{21}$, D = $CR^{24}R^{25}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl,

carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = CR^8R^9, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = NR^{10}, D = CR^8R^9.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = NR^{23}, D = CR^8R^9.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

A = O, B = CR^7R^8.

E = NR^7, D = CR^7R^8.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = NR^{10}, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = NR^{10}, D = CR^8R^9.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl,

carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

A = CR^7R^8; B = O.

E = O, D = CR^7R^8.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = O, E = O, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = NR^{10}, E = O, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide,

a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = $CR^{20}R^{21}$, E = O, D = $CR^{24}R^{25}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = S, E = O, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{16}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = O, E = S, D = $CR^{20}R^{21}$.

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl,

carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = NR^{10}, E = S, D = $CR^{21}R^{22}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = $CR^{20}R^{21}$, E = S, D = $CR^{24}R^{25}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = S, E = S, D = $CR^{20}R^{21}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^8, B = O, E = $CR^{20}R^{21}$, D = $CR^{24}R^{25}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = NR^{10}, E = $CR^{21}R^{22}$, D = $CR^{24}R^{25}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

$A = CR^8R^9$, $B = CR^{20}R^{21}$, $E = CR^{24}R^{25}$, $D = CR^{26}R^{27}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{16}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

$A = CR^8R^9$, B = S, $E = CR^{21}R^{22}$, $D = CR^{24}R^{25}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl,

carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = O, E = NR^{10}, D = $CR^{21}R^{22}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = NR^{10}, E = NR^{23}, D = $CR^{21}R^{22}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9, B = $CR^{21}R^{22}$, E = NR^{10}, D = $CR^{24}R^{25}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In another sub-embodiment, a structure of the formula (III) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

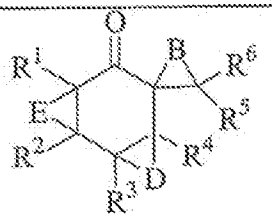
A = CR^8R^9, B = S, E = NR^{10}, D = $CR^{21}R^{22}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S).

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

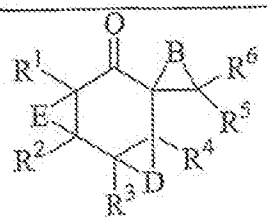
R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$.

In a particular embodiment of the present invention, the compounds of the formula (III) are the following species:



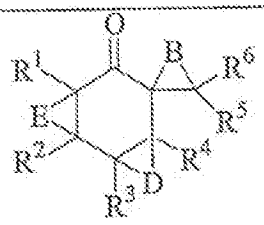
(III)

B	D	E	R^1	R^2	R^3	R^4	R^5	R^6
O	O	O	Me	H	H	H	Me	Me
O	O	O	*i*-Pr	H	H	H	Me	Me
O	O	O	Ph	H	H	H	Me	Me
O	O	O	Me	Me	H	H	Me	Me
O	O	O	*i*-Pr	Me	H	H	Me	Me



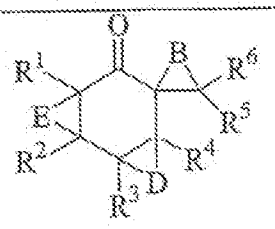
(III)

B	D	E	R^1	R^2	R^3	R^4	R^5	R^6
O	O	O	Ph	Me	H	H	Me	Me
O	O	O	Me	H	Me	H	Me	Me
O	O	O	*i*-Pr	H	Me	H	Me	Me
O	O	O	Ph	H	Me	H	Me	Me
O	O	O	Me	H	H	Me	Me	Me
O	O	O	*i*-Pr	H	H	Me	Me	Me
O	O	O	Ph	H	H	Me	Me	Me
O	O	O	Me	H	CH_2Ph	H	Me	Me
O	O	O	*i*-Pr	H	CH_2Ph	H	Me	Me
O	O	O	Ph	H	CH_2Ph	H	Me	Me
CH_2	O	O	Me	H	H	H	Me	Me
CH_2	O	O	*i*-Pr	H	H	H	Me	Me
CH_2	O	O	Ph	H	H	H	Me	Me
CH_2	O	O	Me	Me	H	H	Me	Me
CH_2	O	O	*i*-Pr	Me	H	H	Me	Me
CH_2	O	O	Ph	Me	H	H	Me	Me
CH_2	O	O	Me	H	Me	H	Me	Me
CH_2	O	O	*i*-Pr	H	Me	H	Me	Me
CH_2	O	O	Ph	H	Me	H	Me	Me



(III)

B	D	E	R^1	R^2	R^3	R^4	R^5	R^6
CH_2	O	O	Me	H	H	Me	Me	Me
CH_2	O	O	*i*-Pr	H	H	Me	Me	Me
CH_2	O	O	Ph	H	H	Me	Me	Me
CH_2	O	O	Me	H	CH_2Ph	H	Me	Me
CH_2	O	O	*i*-Pr	H	CH_2Ph	H	Me	Me
CH_2	O	O	Ph	H	CH_2Ph	H	Me	Me
CH_2	CH_2	O	Ph	H	CH_2Ph	H	Me	Me
CH_2	CH_2	O	Me	H	H	H	Me	Me
CH_2	CH_2	O	*i*-Pr	H	H	H	Me	Me
CH_2	CH_2	O	Ph	H	H	H	Me	Me
CH_2	CH_2	O	Me	Me	H	H	Me	Me
CH_2	CH_2	O	*i*-Pr	Me	H	H	Me	Me
CH_2	CH_2	O	Ph	Me	H	H	Me	Me
CH_2	CH_2	O	Me	H	Me	H	Me	Me
CH_2	CH_2	O	*i*-Pr	H	Me	H	Me	Me
CH_2	CH_2	O	Ph	H	Me	H	Me	Me
CH_2	CH_2	O	Me	H	H	Me	Me	Me
CH_2	CH_2	O	*i*-Pr	H	H	Me	Me	Me
CH_2	CH_2	O	Ph	H	H	Me	Me	Me



(III)

B	D	E	R^1	R^2	R^3	R^4	R^5	R^6
CH_2	CH_2	O	Me	H	CH_2Ph	H	Me	Me
CH_2	CH_2	O	*i*-Pr	H	CH_2Ph	H	Me	Me
CH_2	CH_2	O	Ph	H	CH_2Ph	H	Me	Me
CH_2	O	CH_2	Me	H	H	H	Me	Me
CH_2	O	CH_2	*i*-Pr	H	H	H	Me	Me
CH_2	O	CH_2	Ph	H	H	H	Me	Me
CH_2	O	CH_2	Me	Me	H	H	Me	Me
CH_2	O	CH_2	*i*-Pr	Me	H	H	Me	Me
CH_2	O	CH_2	Ph	Me	H	H	Me	Me
CH_2	O	CH_2	Me	H	Me	H	Me	Me
CH_2	O	CH_2	*i*-Pr	H	Me	H	Me	Me
CH_2	O	CH_2	Ph	H	Me	H	Me	Me
CH_2	O	CH_2	Me	H	H	Me	Me	Me
CH_2	O	CH_2	*i*-Pr	H	H	Me	Me	Me
CH_2	O	CH_2	Ph	H	H	Me	Me	Me
CH_2	O	CH_2	Me	H	CH_2Ph	H	Me	Me
CH_2	O	CH_2	*i*-Pr	H	CH_2Ph	H	Me	Me
CH_2	O	CH_2	Ph	H	CH_2Ph	H	Me	Me

In a sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A is O, S or NR^7;

B and E are independently selected from CR^8R^9, O, S or NR^{10};

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^7 (X = O, NR^8 or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16} and R^{17} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$; and

the dotted line indicates the presence of either a single or double bond, wherein the presence of a single bond, the valences are completed by hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = O;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = O;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = O;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{16}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = O;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl,

alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = O, E = S;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = S;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{16}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = S;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide,

phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = S;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, CR^{15}=CR^{16}, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O; B = O, E = CR^8R^9;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = CR^7R^8;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = $CR^{21}R^{22}$;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = CR^8R^9;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide,

a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}{=}CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O; B = O, E = NR^{10};

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{16}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = NR^{10}, E = NR^{23};

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{16}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = CR^8R^9, E = NR^{10};

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide,

a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{15}R^{16}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O, B = S, E = NR^{10};

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = O; B = O, E = O;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{13} (X = O, NR^{14} or S);

R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, R^{20}, R^{21}, R^{22} and R^{23} independently are selected from the groups that include hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, alkaryl, arylalkyl, heterocyclic, sulfonyl, sulfanyl, sulfinyl, sulfamonyl, carboxylic acid, amide, nitro, cyano, azide, phosphonyl, phosphinyl, phosphoryl, phosphine, carbamate, ester, alkcarbonyl, carbonyl, halide, a residue of a natural or synthetic amino acid, or carbohydrate or XR^{11} (X = O, NR^{12} or S);

R^1 and R^2, R^2 and R^3, R^3 and R^4, R^4 and R^5 and R^5 and R^6 can also each be comprised of one or two $CR^{13}R^{14}$ groups, connected by a tether, independently selected from $CR^{15}R^{16}$, $CR^{15}R^{16}CR^{17}R^{18}$, $CR^{15}=CR^{16}$, $CR^{15}R^{16}O$ or $CR^{15}R^{16}NR^{17}$;

the dotted line indicates the presence of either a single or double bond, wherein in the presence of a single bond, the valences are completed with hydrogens.

In another sub-embodiment, a structure of the formula (IV) is given wherein the compound or its pharmaceutically acceptable salts or prodrug is defined as follows:

A = CR^8R^9; B = O, E = O;

R^1 is selected independently from the groups that include hydrogen, alkyl, cycloalkyl, aryl, alkaryl, arylalkyl, heterocyclic, ester, alkcarbonyl, carbonyl, halide,